



**NORTHWEST POWER
NORTHWEST VALUES**

Job Title & Series: Electrical Engineer (Energy Management Systems), GS-850	Job Announcement Number: 9931-12-DE
Grade & Salary Range: GS-09: \$54,028 - \$66,493 GS-11: \$60,520 - \$78,674 GS-12: \$72,540 - \$94,300 <i>Full performance level: GS-12. May be filled at any level above.</i>	Opens: 03/27/12 Closes: 04/16/12 <i>(Applications must be received by 11:59 p.m. Pacific Time (PT) to be accepted.)</i>
Benefits: BPA offers a comprehensive benefits package. http://www.jobs.bpa.gov/Benefits/ This position is eligible for the CATPP (Consecutive Accelerated Training and Promotion Program) which currently allows for two accelerated promotions of 6 months up to GS-12.	
Organization: Transmission Services / System Operations / Real Time Control System Software / Energy Management Systems (TOSE)	Location: Vancouver, WA
Type of Position: This is a temporary position with a full-time work schedule. This first period of time for this Term Appointment may not exceed 13 months. At that time BPA will decide whether it is in the best interest of the agency to extend the appointment for up to a total appointment of three years, extensions are not expected to go beyond 9/30/2013. At the expiration of the three year period, the appointment will be terminated. A term appointment does not confer competitive (permanent) status nor entitle the term employee to non-competitive appointment to permanent positions or transfer to other agencies without competition. Term employees are eligible for coverage under the retirement system, health insurance, life insurance and Thrift Savings Plan (401K). Employees are also eligible to receive within grade increases (periodic pay raises) if work performance is satisfactory; and annual comparability pay increase as established by Executive Orders.	
Anticipated number of positions to be filled: More than one position may be filled.	

ELIGIBILITY

All United States citizens are eligible to apply.

ABOUT BPA

The Bonneville Power Administration has been powering people and careers for nearly 75 years. We are a non-profit federal agency that provides clean, emissions-free electricity to the Pacific Northwest and maintains a high voltage transmission system to deliver that electricity. We are a leader in sustainability and environmental stewardship, promoting energy efficiency, renewable energy, the smart grid, fish and wildlife protection and initiatives to address climate change. We are a visionary and innovative agency that values diversity and creativity and encourages continuous learning. We are located throughout the Pacific Northwest with opportunities in cities, smaller communities and rural areas. You can learn more about BPA at www.bpa.gov.

JOB SUMMARY & MAJOR DUTIES

System Operations (TO) is responsible for the safe, reliable, and open access operation and dispatch of the high voltage transmission system and interconnected generation. They operate and manage two regional control centers and represent BPA on operations and other issues through participation in regional and national groups and sponsor and support Technology Innovation (TI) within the operations arena.

Real Time Control Systems Software is responsible for the planning, analysis, design, engineering, delivery, and maintenance support of systems used to provide safe and reliable real-time control, dispatch, analysis, management, and protection of the transmission system. These systems typically located within the system operations control centers are used for 24 X7 support of the power system. The group ensures that these critical systems conform to appropriate industry and regulatory requirements and participates in and support the development of applicable standards at the regional and national level.

Energy Management Systems (EMS) (TOSE) provides life-cycle support for Energy Management Systems (EMS) used in support of BPA's Control Centers. This includes engineering, design, operations and maintenance support and technical leadership for systems such as Supervisory Control and Data Acquisition (SCADA), Automatic Generation Control (AGC), on-line power flow and state estimation, systems which provide real-time operational data and dispatcher training environments which simulate the real world. Responsibility also includes applicable cyber security functions and supplemental project support.

- Part of a team that is responsible for the development and maintenance of BPA's Energy Management Systems (EMS). This position specifically supports the Automatic Generation Control (AGC) system which regulates the power output of electric generators within a control area in response to changes in load, system frequency, and other factors to maintain the scheduled system frequency and interchanges with other control areas.
- Reviews and tests proposed changes to the production AGC system to insure correct performance. Effectively uses various simulation tools for open and closed loop testing of real-time control software.
- Develops new algorithms, methods, tools and procedures to effectively diagnose and correct problems.
- Routinely involved in the modification, integration and migration of BPA's EMS systems to new software versions.
- Occasionally called outside regularly scheduled hours for consultation related to computer operations, equipment failure or program revisions. At times must come in to give assistance in correcting problems.

QUALIFICATIONS

SPECIALIZED EXPERIENCE

GS-9 Electrical engineering experience assisting with the maintenance of energy management systems applications.

GS-11 Electrical engineering experience assisting with and maintaining energy management systems applications.

GS-12 Electrical engineering experience assisting with, maintaining and developing energy management systems applications.

In order to be rated as meeting the minimum qualifications, we must be able to determine from your application package (includes resume, cover letter, KSAs, etc.) that you have a minimum of **one year** of the specialized experience requirement described above. Applicants who have qualifying experience performed on less than a full-time basis must specify the percentage and length of time spent in performance of such duties.

EDUCATION

College transcripts are required. Failure to submit will result in a rating of not qualified.

- A. Degree: professional engineering. To be acceptable, the curriculum must: (1) be in a school of engineering with at least one curriculum accredited by the Accreditation Board for Engineering and Technology (ABET) as a professional engineering curriculum; or (2) include differential and integral calculus and courses (more advanced than first-year physics and chemistry) in five of the following seven areas of engineering science or physics: (a) statics, dynamics; (b) strength of materials (stress-strain relationships); (c) fluid mechanics, hydraulics; (d) thermodynamics; (e) electrical fields and circuits; (f) nature and properties of materials (relating particle and aggregate structure to properties); and (g) any other comparable area of fundamental engineering science or physics, such as optics, heat transfer, soil mechanics, or electronics.

OR

B. Combination of education and experience – college-level education, training, and/or technical experience that furnished (1) a thorough knowledge of the physical and mathematical sciences underlying professional engineering, and (2) a good understanding; both theoretical and practical, of the engineering sciences and techniques and their applications to one of the branches of engineering. The adequacy of such background must be demonstrated by one of the following:

1. Professional Registration – Current registration as a professional engineer by any State, the District of Columbia, Guam, or Puerto Rico. Absent other means of qualifying under this standard, those applicants who achieved such registration by means other than written test are eligible only for positions that are within or closely related to the specialty field of their registration.
2. Written Test – Evidence of having successfully passed the Fundamentals-In-Engineering (FE) examination, or the written test required for professional registration, which is administered by the Boards of Engineering Examiners in the various States, the District of Columbia, Guam, and Puerto Rico. Applicants who have passed the examination and have completed all the requirements for either (a) a bachelor's degree in engineering technology (BET) from an accredited college or university that included 60 semester hours of courses in the physical, mathematical, and engineering sciences, or (b) a BET from a program accredited by the Accreditation Board for Engineering and Technology (ABET) may be rated eligible for certain engineering positions at the GS-5 level. Eligibility is limited to positions that are within or closely related to the specialty field of the engineering technology program.
3. Specified Academic Courses – Successful completion of at least 60 semester hours of courses in the physical, mathematical, and engineering sciences and in engineering that included the courses specified in the basic requirements. The courses must be fully acceptable toward meeting the requirements of a professional engineering curriculum as described in paragraph A.

Related Curriculum – Successful completion of a curriculum leading to a bachelor's degree in engineering technology or in an appropriate professional field, e.g., physics, chemistry, architecture, computer science, mathematics, hydrology, or geology, may be accepted in lieu of a degree in engineering, provided the applicant has had at least 1 year of professional engineering experience acquired under professional engineering supervision and guidance.

Education obtained outside the United States: If your education has been obtained outside the U.S, you must submit proof with your application that your transcripts have been evaluated by a private organization that specializes in interpretation of foreign educational credentials and have been deemed at least equivalent to that gained in conventional U.S. education institutions.

Substitution of education for specialized experience: Completion of education in the amounts shown below is qualifying at grades, GS-09 and GS-11 if it provided the knowledge, skills and abilities necessary to do the work of the position.

GS-09: 2 years of progressively higher level graduate education leading to a master's degree or master's or equivalent graduate degree.

GS-11: 3 years of progressively higher level graduate education leading to a Ph.D. degree or Ph.D. or equivalent doctoral degree.

KNOWLEDGE, SKILLS, AND ABILITIES

Your application materials will be reviewed against the knowledge, skills and abilities (KSAs) listed below to determine your category rating: Best Qualified, Highly Qualified, or Qualified. Within these categories, applicants eligible for veteran's preference will receive selection priority over non-veterans.

Clearly articulating your work experience to determine the application of the knowledge, skills or abilities through performance is critical to determining your qualifications for this position. Please describe your experience and thoroughly address the statements below through your resume, cover letter, and/or other supporting material you choose to submit. Work product examples will not be reviewed unless specifically requested. For more information on how to provide supporting information for KSAs, please visit http://jobs.bpa.gov/How_To_Apply/ksa.cfm.

1. Engineering knowledge and experience related to applications which comprise an energy management system. Including:

- *EMS applications used*
- *EMS projects; roles and responsibilities; scope of projects*

- *Identification of technical requirements*
- *Enhancements or improvements made*
- *Activities supported: modifications, development, testing, integration, migration of software applications and databases*

2. Ability to identify problems and recommend solutions to application issues. Including:

- *Identification of technical requirements*
- *Problem solving*
- *Communicate changes*
- *Use of standardized processes*
- *Coordination of problem resolution*

3. Ability to communicate technical information. Including:

- *Types of written communication*
- *Types of oral presentations*
- *Audiences*
- *Examples of negotiating or persuasion communications*
- *Examples of conflict resolution*

ADDITIONAL REQUIREMENTS

- 1 to 5 nights of overnight travel per month is a requirement of this position.

SECURITY & SUITABILITY

The sensitivity level of this position is designated as High Risk – Non-sensitive, which requires that the selectee pass a BI (Background Investigation, SF 85P) personnel investigation and receive a favorable suitability determination. For more information please visit: http://jobs.bpa.gov/How_To_Apply/faqs.cfm#18

APPLICATION PACKAGE CHECKLIST

☐ Resume, cover letter, and/or other supporting material you choose to submit that fully describes your education and experience. Application must contain sufficient information to determine eligibility for the position.

Applications must include the following information:

- Job Announcement number, title, and grade
- Full legal name, mailing address, contact telephone number and email address
- Country of citizenship
- High school attended which includes name of high school and location.
- Employment history [Unpaid experience (internships, volunteer work, etc.) related to the position may also be included]. Include job title (include series and grade if position was Federal), duties and accomplishments, employer's name and address, supervisor's name and phone number, starting and ending dates (month and year), salary, and hours worked per week. Explain any gaps in employment.
- Indicate if we may contact your current supervisor.
- A list of other job-related training, skills (i.e., languages, tools, machinery, typing speed, etc.), certificates and licenses, recognition, professional memberships, publications, leadership activities, etc.

College transcripts (photocopies are acceptable)

☐ VETERANS: To be considered for veteran's preference, a copy of your DD-214 (Member 4) is required. 10-point veterans must also provide a copy of their SF-15 and associated documentation.

☐ All applicants are encouraged to complete and submit the attached Applicant Source and Ethnicity and Race form.

If your application package does not provide all the information requested in the vacancy announcement, you may lose consideration. Material received after the closing date will not be accepted.

How to Submit Your Application

Applications may be emailed, faxed or mailed. Due to security requirements, we only accept hand-delivered application from individuals who currently have badge access to the building.

- **Email to:** jobs@bpa.gov with the Job Announcement Number in the subject line and on any attachments.
- **Fax to:** 503-230-3149
- **Send via US Mail to:** Bonneville Power Administration, ATTN: Human Capital Management, NHQ-1, PO Box 3621, Portland, OR 97208-3621.

You will be notified via email to confirm receipt of your application package. *Applicants should retain a copy of their application as BPA does not return applications or provide copies.* For more information on the hiring process, please refer to: http://jobs.bpa.gov/How_To_Apply/whathappens.cfm.

Additional Information

Veterans Information: <http://www.usajobs.gov/vi>

Career Transition Assistance Program/Interagency Career Transition Assistance Program

(CTAP/ICTAP): Federal employees seeking CTAP/ICTAP eligibility must submit proof that they meet the requirements of 5 CFR 330.605 (a) for CTAP and 5 CFR 330.704 for ICTAP. This includes a copy of the agency notice, a copy of their most recent Performance Rating and a copy of their most recent SF-50 noting current position, grade level, and duty location. **Please annotate your application to reflect that you are applying as a CTAP or ICTAP eligible.** For additional information please refer to <http://www.opm.gov/ctap/>

EEO Policy Statement: <http://www.usajobs.gov/eeo>

Reasonable Accommodation Policy Statement: <http://www.usajobs.gov/raps>

Legal and Regulatory Guidance: <http://www.usajobs.gov/lrg>

Forms Availability: All application materials may be obtained by calling 503-230-3230, or 1-877-975-4272 or visiting: <http://www.jobs.bpa.gov> .

Applicant Source Form

The Bonneville Power Administration's Human Capital Management office has an ongoing process improvement objective associated with recruitment and outreach strategies. In order for us to assess the effectiveness of our current advertising and Recruitment efforts, please identify how you learned about this job by marking the appropriate box below:

Vacancy Announcement Number	Position Title, Series, Grade
<input type="text"/>	<input type="text"/>

☐ **BPA Website**

☐ **USAJOBS Website**

☐ **Job Board** (CareerBuilder, Craigslist, Employment Dept, etc.)

(please specify): _____

☐ **Industry Website or Event** (National Institute of Government Purchasers, GreenDrinks, etc.)

(please specify): _____

☐ **Social Media Website** (Facebook, LinkedIn, etc.)

(please specify): _____

☐ **Career Fair** (campus events, community event)

(please specify): _____


☐ **BPA employee**

☐ **Other (please specify):** _____

U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION

Approved by Forms Mgmt.
06/10/2010

APPLICANT DISABILITY, RACE/NATIONAL ORIGIN AND GENDER IDENTIFICATION
(Please read the instructions and Privacy Act Statement before completing this form)

U.S. Office of Personnel Management Guide to Personnel Data Standards	ETHNICITY AND RACE IDENTIFICATION (Please read the Privacy Act Statement and instructions before completing form.)
Name (Last, First, Middle Initial) 	
Agency Use Only	
Privacy Act Statement Ethnicity and race information is requested under the authority of 42 U.S.C. Section 2000e-16 and in compliance with the Office of Management and Budget's 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Providing this information is voluntary and has no impact on your employment status, but in the instance of missing information, your employing agency will attempt to identify your race and ethnicity by visual observation. This information is used as necessary to plan for equal employment opportunity throughout the Federal government. It is also used by the U. S. Office of Personnel Management or employing agency maintaining the records to locate individuals for personnel research or survey response and in the production of summary descriptive statistics and analytical studies in support of the function for which the records are collected and maintained, or for related workforce studies.	
Specific Instructions: The two questions below are designed to identify your ethnicity and race. Regardless of your answer to question 1, go to question 2.	
Question 1. Are You Hispanic or Latino? (A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.) <input type="checkbox"/> Yes <input type="checkbox"/> No	
Question 2. Please select the racial category or categories with which you most closely identify by placing an "X" in the appropriate box. Check as many as apply.	
RACIAL CATEGORY (Check as many as apply)	DEFINITION OF CATEGORY
<input type="checkbox"/> American Indian or Alaska Native	A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
<input type="checkbox"/> Asian	A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
<input type="checkbox"/> Black or African American	A person having origins in any of the black racial groups of Africa.
<input type="checkbox"/> Native Hawaiian or Other Pacific Islander	A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
<input type="checkbox"/> White	A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.